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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,700	03/06/2002	Rotem Cooper	010112	2538
23696	7590	12/17/2003	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			CONTEE, JOY KIMBERLY	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 12/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,700

Applicant(s)

COOPER, ROTEM

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 1, line 5, should be updated to reflect prior provisional, US application serial number 60/355,742.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3,7,18,19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wild et al. (Wild), U.S. Patent No. 5,862,480.

Regarding claim 1, Wild discloses in a mobile station storing a list of wireless communications systems, a system acquisition procedure comprising the steps of:

selecting a group of wireless communications systems from the list in accordance with a predetermined system acquisition procedure, the group of wireless communications systems having a first system acquisition order (i.e., reads on group of

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all overlapping networks which the subscriber unit (SU) is allowed to use) (col. 5, lines 33-38);

measuring a signal quality (i.e., inherent for determination of best quality communications for prioritization) for each of the selected systems (col. 10, lines 48-51);

reprioritizing the group of wireless communications systems in accordance with the measured signal quality, the reprioritized group of wireless communications systems having a second system acquisition order (col. 10, lines 45-58); and

attempting to acquire the wireless communications system having the highest priority in accordance with the second system acquisition order (col. 14, lines 8-12).

Regarding claim 2, Wild discloses the method of claim 1, wherein the list of wireless communications systems is a preferred roaming list including a geographic region identifier (i.e., inherently the geographical area is identified) and the step of selecting a group of wireless communications systems includes determining a current geographic region of the mobile station and selecting the listed wireless communications systems having a geographic region identifier that corresponds to the current geographic region of the mobile station (col. 4, lines 21-39 and col. 7, lines 62-67), and

wherein the first system acquisition order (i.e., reads on hierarchically ordered bases on SU preferences) is based on the relative order of the selected wireless communications systems in the preferred roaming list (col. 4, lines 31-39).

Regarding claim 3, Wild discloses the method of claim 2, wherein each wireless communications system identified in the preferred roaming list has a corresponding

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desirability level (i.e., reads on list of accessible networks), inherently at least two of the selected systems sharing the same level of desirability, and wherein the step of reprioritizing comprises locating selected systems that share the same desirability level and sorting the located systems by the inherently measured signal strength (i.e., reads on best quality communications, hence strong signal strength) (col. 10, lines 44-58).

Regarding claim 7, Wild discloses a mobile station comprising:

a memory (see Fig. 19, 1904) storing a preferred roaming list (i.e., access server returns a list of accessible networks to the subscriber), the preferred roaming list including a first plurality of system identifiers and corresponding acquisition parameters (col. 16, lines 8-11); and

a processing circuitry (see Fig. 19, 1902) adapted to select wireless communications systems from the preferred roaming list in accordance with a predetermined system acquisition procedure, the selected wireless communications system have a corresponding system acquisition order based on the measured signal qualities, the modified system acquisition order increasing the efficiency of the system acquisition process (col. 4, lines 32-39 and col. 16, lines 12-22).

Regarding claim 18, Wild discloses in a wireless device, an integrated circuit comprising:

a system determination unit (i.e., reads on access server) adapted to identify candidate communications systems in a current geographic region of the wireless device (col. 4, lines 21-32); and

a searcher inherently coupled to the system determination unit (i.e., reads on processor 1802, see Fig. 18), the searcher adapted to analyze a signal quality (i.e., determination of best quality communications) of at least one of the identified wireless communications systems to determine a likelihood of whether the wireless communications system will be acquired (col. 13, lines 47-66 and col. 15, line 50 to col. 16, line 4).

Regarding claim 19, Wild discloses the integrated circuit of claim 18, wherein inherently the searcher measures the strength of a received signal corresponding to each identified wireless communications system (i.e., reads on network air interface parameters for the determination of best quality communications) (col. 15, line 63-67).

Regarding claim 21, Wild discloses the integrated circuit of claim 18 further comprising a memory (see Fig. 18, 1804) coupled to the system determination unit the memory storing a list of known communications systems, each known communications system having an associated geographic region and relative desirability, wherein the systems analyzed by the searcher are selected from the system table by the system determination unit (col. 4, lines 32-33 and col. 15, lines 63-67).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10-13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hutcheson et al (Hutcheson), U.S. Patent No. 5,551,059.

Regarding claim 10, Hutcheson discloses in a multi-mode mobile station adapted to operate in CDMA and AMPS modes, a method for acquiring a wireless communication system comprising the steps of:

analyzing a signal received on a channel associated with a candidate communications system (i.e., inherently reads on target cell when roaming, see col. 3, lines 23-27) (col. 6, lines 12-21);

determining, based on the analysis of the received signal, whether the candidate communications system (cell) is likely to be available for acquisition by the mobile station (col. 6, lines 12-34); and

attempting to acquire the candidate communications system (cell) only (i.e., inherent if target cells are prioritized candidates) if the candidate communications system is likely to be available for acquisition (col. 6, lines 27-39).

Regarding claim 11, Hutcheson discloses the method of claim 10, wherein the step of analyzing comprises switching to a channel associated with the candidate communication system and testing a signal quality of the received signal (col. 6, lines 22-26).

Regarding claim 12, Hutcheson discloses the method of claim 11, wherein the mobile stations includes a table of known communications systems, each known communications system having a relative desirability, and wherein the candidate communications system is selected from the table of known communications systems in accordance with a predetermined system acquisition procedure.

Regarding claim 13, Wild discloses the method of claim 11, wherein the tested signal quality is a received signal strength measurement (col. 6, lines 12-26).

Regarding claim 15, Wild discloses the method of claim 11, wherein the candidate communications system is likely to be available if the measured signal quality exceeds a predetermined threshold value (i.e., reads on benchmark) (col. 6, lines 12-21).

Regarding claim 16, Wild discloses the method of claim 11, further comprising the step of selecting a set of candidate communications systems, wherein the steps of analyzing and determining are repeated for each candidate communications system in the set and the step of attempting is performed for the candidate communications system that is most likely to be acquired (col. 6, lines 22-34).

Regarding claim 17, Wild discloses the method of claim 16, further comprising the step of sorting the candidate communications systems in order of measured signal quality, the sorted order defining an acquisition order for the set of candidate communications systems (col. 6, lines 35-39).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutcheson.

Regarding claim 14, Hutcheson discloses the method of claim 11, but fails to explicitly disclose wherein the tested signal quality is a signal-to -noise ratio of the received signal.

However, Examiner takes official notice that is well known in the art that a signal quality test includes the signal-to -noise ratio of the received signal.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Hutcheson to include such a test, since Hutcheson suggests using any known signal quality evaluation technique (see col. 5, lines 15-19).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-9 and 18-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-25 of copending Application No. 10/092,770. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 21-25 of 10/092,779 (hereafter '779) encompass the scope of claims 7-9 of the instant application.

Regarding claim 1 and its dependents (2-3), the primary difference between the applications is as follows: dependent claims 22 –24 of '779 bring forth the measuring of signal quality (i.e., reads on measuring signal power) (see claim 24).

Regarding claims 4-6, dependent claims 23 and 25 incorporate the limitations therein.

Regarding claim 7, the primary differences between the limitations of the two applications are listed as follows: (a) independent claim 21 of '779 uses the terminology "priority data" and maintaining thereof; however, the instant application's claims 7 uses the terminology "predetermined system acquisition procedure", which by definition would include priority data; (b) claim 21 of '779 describes, *inter alia*, the mobile unit comprising wherein the processing circuit is further adapted to detect a communications event for a currently selected wireless communications system and update an entry in the system priority data to reflect the occurrence of the detected communications event; however, claim 7 of the instant application describes wherein the processing circuitry is adapted to measure a signal quality of each system and modifies the system based on such. Moreover, dependent claim 24 of '779 incorporates a similar notion, wherein the

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processing circuitry is further adapted to measure the power of a received signal of the selected network.

Regarding claims 8 and 9, dependent claims 23 and 25 of '779 incorporate the limitations therein.

Regarding claims 18-23, claims 21-25 incorporate the limitations therein, wherein the signal quality is brought out in dependent claim 25 of '779

Omission of element and its function in combination is obvious expedient if remaining elements perform same function as before. In re KARLSON (CCPA) 136 USPQ 184 (1963).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-93064.

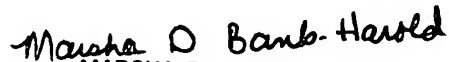
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Joy K. Contee



December 10, 2003


MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
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